AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning at page 8, line 27 with the following rewritten paragraph:

--In Fig. 2, a scheme of a dichroic reflective-type polarizer according to the invention is presented including a layer 1 dichroically absorbing electromagnetic radiation, a layer ~~[11]~~ 5 completely reflecting electromagnetic radiation, and a layer ~~[5]~~ 6 partially reflecting electromagnetic radiation. All layers are consecutively deposited onto a substrate 2.--

Please replace the paragraph beginning at page 8, line 32 with the following rewritten paragraph:

--Operation of the proposed dichroic reflective polarizer can be explained as follows. The non-polarized electromagnetic radiation consists of two linearly polarized components 7 and 8, with their polarization planes mutually perpendicular (these two components are conventionally shown apart from each other in Figs. 2 and 3 for better presentation and understanding). The absorbed and not further used component 7, which is polarized parallel to the absorption axis of the layer 1 dichroically absorbing electromagnetic radiation, is partially reflected from the layer ~~[5]~~ 6 partially reflecting electromagnetic radiation, and forms the beam 9. The other part of energy of the component 7 passes through the layer 1 dichroically absorbing electromagnetic radiation, and, after being reflected from the layer ~~[11]~~ 5 completely reflecting electromagnetic radiation, passes the layer 1 once again and then the layer ~~[5]~~ 6 forming the beam 10. The reflected beams 9 and 10 are polarized identically to the initial component 7. The thickness of the layer 1 is chosen so as the optical path length difference between beams 9 and 10 becomes an odd number of half-waves of polarized electromagnetic radiation, where the wavelength corresponds to the middle of the used spectral range. In this case, interference of the beams 9 and 10 result in their mutual weakening, and the complete cancellation in the optimum case. Complete mutual cancellation of the beams 9 and 10 is achieved if the intensities (amplitudes) of the beams 9 and 10 have either identical or close values, which can be achieved by optimally selecting reflection coefficients of the reflecting layers 5 and ~~[11]~~ 6. The reflecting layer 5 and ~~[11]~~ 6 can be made of metal, semiconductor or dielectric, and be either single-layer or multilayer.--

Please replace the paragraph beginning at page 9, line 16 with the following rewritten paragraph:

--The other further used linearly polarized component 8 non-absorbed in the layer 1, which is polarized perpendicularly to the optical axis (absorption axis) of the layer 1, is partially reflected form the layer ~~[5]~~ 6 partially reflecting electromagnetic radiation, and forms the beam ~~[12]~~ 11. The other part of energy of the component 8 passes through the layer 1 dichroically absorbing electromagnetic radiation, and, after being reflected from the layer ~~[11]~~ 5, passes the layer 1 once again and then the layer ~~[5]~~ 6, and forms the beam ~~[13]~~ 12. The reflected beams ~~[12]~~ 11 and ~~[13]~~ 12 are polarized identically to the initial component 8. Interference results in weakening the beams ~~[12]~~ 11 and ~~[13]~~ 12 considerably less than the beams 9 and 10. This is caused by the fact that their intensities considerably differ because of the negligibly small absorption of the beam ~~[10]~~ 12 in the layer 1.--

Please replace the paragraph beginning at page 9, line 27 with the following rewritten paragraph:

--In Fig. 3, the scheme of a dichroic polarizer of a transmissive type according to the invention is presented. The polarizer includes a layer 1 dichroically absorbing electromagnetic radiation and layers ~~[2]~~ 6 and ~~[14]~~ 13 partially reflecting electromagnetic radiation. All layers are deposited onto a substrate 2.--

Please replace the paragraph beginning at page 9, line 31 with the following rewritten paragraph:

--Operation of a dichroic transmissive-type polarizer of electromagnetic radiation according to the invention can be explained as follows. The non-polarized electromagnetic radiation consists of two linearly polarized components 7 and 8, with their polarization planes mutually perpendicular. Both of these components pass through the layer ~~[5]~~ 6 partially reflecting electromagnetic radiation, and then through the layer 1 dichroically absorbing electromagnetic radiation. A part of the energy of the components 7 and 8 passes through a layer ~~[14]~~ 13 partially reflecting electromagnetic radiation, and forms beams ~~[16]~~ 14 and 15 respectively. The other part of energy of the components 7 and 8 is reflected from the layer ~~[14]~~ 13 partially reflecting electromagnetic radiation passes the layer 1, becomes reflected from the

layer ~~[5]~~ 6, once again passes the layers 1 and ~~[14]~~ 13, and forms the beams ~~[17]~~ 16 and ~~[18]~~ 17 respectively. The beams 15 and ~~[18]~~ 17 are polarized identically to the initial component 8, i.e., perpendicularly to the absorption axes. The passed beams ~~[16]~~ 14 and ~~[17]~~ 16 are polarized identically to the initial component 7, i.e., parallel-perpendicular to the absorption axes.--

Please replace the paragraph beginning at page 10, line 6 with the following rewritten paragraph:

--The purpose of this invention is achieved because of unequal reduction of the differently polarized components ~~[3]~~ 7 and ~~[7]~~ 8 of electromagnetic radiation passing through a dichroic polarizer during interference of the parts ~~[4]~~ 9 and ~~[6]~~ 10 of the component ~~[3]~~ 7, as well as parts ~~[8]~~ 11 and ~~[11]~~ 12 of the components ~~[7]~~ 8. This is ensured by specially selecting thicknesses of layer 1, ~~[2]~~ 6 and ~~[5]~~ 13. In particular, the optical thickness of the layer 1 dichroically absorbing electromagnetic radiation should be an integer number of wavelengths of polarized electromagnetic radiation. By changing thicknesses of the layers ~~[2]~~ 13 and 5 partially reflecting electromagnetic radiation, it is possible to select the values of reflection coefficients of these layers optimum for increasing the dichroic polarizer efficiency. A criterion for choosing the reflection coefficients of the layers ~~[2]~~ 13 and 5 can be, for example, the maximal contrast of the dichroic polarizer. The optimum thicknesses of the layers ~~[2]~~ 13 and ~~[5]~~ 6 do not affect the basis of the invention.--

Please replace the paragraph beginning at page 10, line 19 with the following rewritten paragraph:

--The layers ~~[2]~~ 13 and ~~[5]~~ 6 partially, reflecting electromagnetic radiation can be made of metal or a multilayer dielectric, which does not affect the basis of the invention.--